



COPY

Atty. Docket No. DX0725K2

(Joint)

ASSIGNMENT

For good and valuable consideration, receipt of which is acknowledged, we,

- (1) Joseph A. Hedrick, residing in Plainsboro, New Jersey, USA
- (2) Theodore R. Sana, residing in East Palo Alto, California, USA
- (3) J. Fernando Bazan, residing in Menlo Park, California, USA
- (4) Robert A. Kastelein, residing in Redwood City, California, USA

hereby sell, assign and transfer to **SCHERING CORPORATION**, a corporation organized under the laws of the State of New Jersey, United States of America, having its principal office at Galloping Hill Road, Kenilworth, New Jersey 07033, United States of America, (hereinafter called "**ASSIGNEE**"), we each do hereby sell, assign and transfer to said **ASSIGNEE** each of our entire right, title and interest in all countries of the world in and to any and all of our inventions and discoveries in

MAMMALIAN CYTOKINES; RELATED REAGENTS AND METHODS

officially identified as Application No. 09/130,972 filed on August 7, 1998, (Attorney Docket Number DX0725K2) in and to the right to file patent applications in the name of **ASSIGNEE**, its designee, or in any or all of our names, at its election, on the aforesaid inventions and discoveries in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified patent application under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement to which the United States now is or hereafter becomes a signatory, in and to any and all Letters Patent that issue on any of the aforesaid patent applications, and in and to any continuations, divisions, reissues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said **ASSIGNEE**, its successors, assigns and other legal representatives, to the full ends of the terms for which a Letters Patent therefor may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

And we hereby covenant and agree that we will at any time, upon the request and at the expense of **ASSIGNEE**, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, patent applications, and Letters Patent and continuations, divisions, reissues, renewals and extensions thereof in **ASSIGNEE**, its successors, assigns or other legal representatives, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and that we will, at any time, upon the request and the expense of **ASSIGNEE**, execute any additional or divisional applications for patents for said inventions and discoveries, or any part or parts thereof, and applications for patents of confirmation, registration and importation based on said Letters Patent and on Letters Patent issuing from said additional or divisional applications and reissues, renewals and extensions therefor, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of **ASSIGNEE**, its successors, assigns or other legal representatives.

Executed this 9th day of November, 19 98.

Joseph A. Hedrick L.S.
Joseph A. Hedrick

STATE OF NEW JERSEY)

COUNTY OF Union)

On 1998 before me, Patricia Citarella Notary Public

personally appeared, Joseph A. Hedrick, [] personally known to me or [] proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Patricia Citarella (SEAL)
NOTARY PUBLIC SIGNATURE

PATRICIA CITARELLA
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires Jan. 4, 1999

Executed this 1st day of December, 19 98.

Theodore R. Sana L.S.
Theodore R. Sana

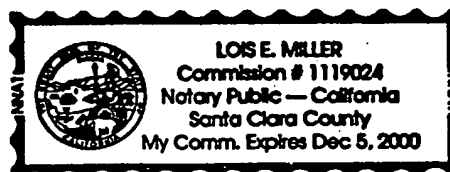
STATE OF CALIFORNIA)
COUNTY OF SANTA CLARA)

On Dec. 1, 1998 before me, Lois E. Miller Notary Public

personally appeared, Theodore R. Sana, ☒ personally known to me or ☐ proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Lois E. Miller (SEAL)
NOTARY PUBLIC SIGNATURE



Executed this 1st day of Dec., 19 98.

[Signature]

J. Fernando Bazan

L.S.

STATE OF CALIFORNIA)
COUNTY OF SANTA CLARA)

On Dec. 1, 1998 before me,

Lois E. Miller, Notary Public

personally appeared, J. Fernando Bazan, ☒ personally known to me ~~or [] proved to me on the basis of satisfactory evidence~~ to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

[Signature]
NOTARY PUBLIC SIGNATURE

(SEAL)



Executed this 1 day of DECEMBER, 19 98.

[Signature]

Robert A. Kastelein

L.S.

STATE OF CALIFORNIA)
COUNTY OF SANTA CLARA)

On Dec. 1, 1998 before me,

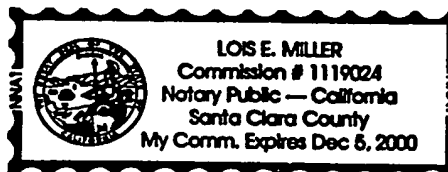
Lois E. Miller, Notary Public

personally appeared, Robert A. Kastelein, ☒ personally known to me ~~or [] proved to me on the basis of satisfactory evidence~~ to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

[Signature]
NOTARY PUBLIC SIGNATURE

(SEAL)





#5

As the below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

"HUMAN CYTOKINES: RELATED REAGENTS AND METHODS"

the specification of which

☐ is attached hereto.

☒ was filed on August 7, 1998 as Application Serial No. 09/130,972

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s):

Priority Claimed

(Number)	(Country)	(Day/Month/Year Filed)	Yes or No
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I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

<u>60/044,165</u>	<u>April 21, 1997</u>
(Application Number)	(Filing Date)

<u>60/055,111</u>	<u>August 6, 1997</u>
(Application Number)	(Filing Date)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as

defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<u>09/097,976</u> (Application Serial No.)	<u>June 16, 1998</u> (Filing Date)	<u>pending</u> (Status – patented, pending, abandoned)
<u>09/062,866</u> (Application Serial No.)	<u>April 20, 1998</u> (Filing Date)	<u>pending</u> (Status – patented, pending, abandoned)

Power of Attorney: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in Patent and Trademark Office connected therewith. (List name and registration number.)

Carl W. Battle	Reg. No. 30,731	Anita W. Magatti	Reg. No. 29,825
Edwin P. Ching	Reg. No. 34,090	John J. Maitner	Reg. No. 25,636
Eric S. Dicker	Reg. No. 31,699	Joseph T. Majka	Reg. No. 30,570
Norman C. Dulak	Reg. No. 31,608	Arthur Mann	Reg. No. 35,598
Cynthia L. Foulke	Reg. No. 32,364	Edward H. Mazer	Reg. No. 27,573
Robert A. Franks	Reg. No. 28,605	Jaye P. McLaughlin	Reg. No. 41,211
James M. Gould	Reg. No. 33,702	Richard B. Murphy	Reg. No. 35,298
Richard J. Grochala	Reg. No. 31,518	James R. Nelson	Reg. No. 27,929
Thomas D. Hoffinan	Reg. No. 28,221	Immac J. Thampoe	Reg. No. 36,322
Henry C. Jeanette	Reg. No. 30,856	Paul A. Thompson	Reg. No. 35,385
Susan Lee	Reg. No. 30,653	Donald W. Wyatt	Reg. No. 40,879

Send Correspondence to: Edwin P. Ching DNAX Research Institute 901 California Avenue Palo Alto, CA 94304-1104	Direct Telephone Calls to: Name: Edwin P. Ching Telephone No.: (650) 496-1204 Facsimile No.: (650) 496-1200
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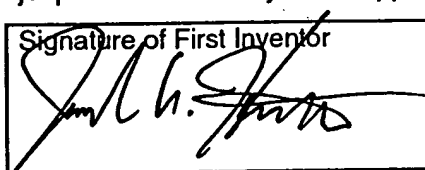
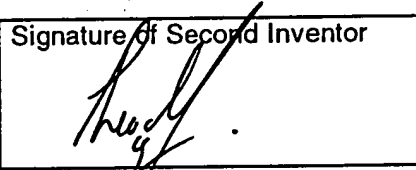
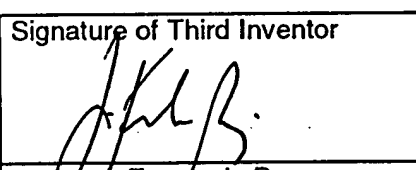
FULL NAME OF 1ST OR SOLE INVENTOR	FAMILY NAME Hedrick	FIRST GIVEN NAME Joseph	SECOND GIVEN NAME A.
RESIDENCE & CITIZENSHIP	CITY Plainsboro	STATE OR FOREIGN COUNTRY New Jersey	COUNTRY OF CITIZENSHIP USA
POST OFFICE ADDRESS	POST OFFICE ADDRESS 52-08 Quail Ridge Drive	CITY Plainsboro	STATE & ZIP CODE/COUNTRY NJ 08536 / USA

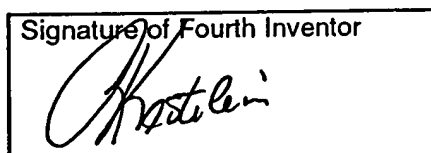
FULL NAME OF 2ND JOINT INVENTOR	FAMILY NAME Sana	FIRST GIVEN NAME Theodore	SECOND GIVEN NAME R.
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FULL NAME OF 3RD JOINT INVENTOR	FAMILY NAME Bazan	FIRST GIVEN NAME J.	SECOND GIVEN NAME Fernando
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POST OFFICE ADDRESS	POST OFFICE ADDRESS 775 University Drive	CITY Menlo Park	STATE & ZIP CODE/COUNTRY CA 94025 / USA

FULL NAME OF 4TH JOINT INVENTOR	FAMILY NAME Kastelein	FIRST GIVEN NAME Robert	SECOND GIVEN NAME A.
RESIDENCE & CITIZENSHIP	CITY Redwood City	STATE OR FOREIGN COUNTRY California	COUNTRY OF CITIZENSHIP The Netherlands
POST OFFICE ADDRESS	POST OFFICE ADDRESS 463 Summit Drive	CITY Redwood City	STATE & ZIP CODE/COUNTRY CA 94062 / USA

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signature of First Inventor 	Signature of Second Inventor 	Signature of Third Inventor 
Joseph A. Hedrick	Theodore R. Sana	J. Fernando Bazan
Date 9.17.98	Date 9/22/98	Date 9/21/98

Signature of Fourth Inventor 
Robert A. Kastelein
Date 9.22.98